U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION III
CLEAN WATER ACT
COMPLIANCE INSPECTION REPORT

for

Name of Facility: Fort Totten Ready-Mix Concrete Facility
Facility Address: 5001 Fort Totten Drive NE, Washington, DC 20011
Mailing Address: 6401 Golden Triangle Drive, Suite 400, Greenbelt, MD 20770

Report Prepared on: April 26, 2013 *Date* By: Lauren A Scott *Signature*, ERG

Report Final as of: September 19, 2013 *Date* By: Allison Graham *Signature*, EPA

General Information

Type of Facility:	Industrial	**SIC Code:**	3273
Activity/Product:	Manufacture of Ready-Mix Concrete		
Owner:	Super Concrete Corporation (d/b/a Aggregate Industries)		
Operator:	Super Concrete Corporation (d/b/a Aggregate Industries)		
Permittee:	Super Concrete Corporation (d/b/a Aggregate Industries)		
Permit Application Date:	April 7, 2008		
Permit Tracking Number:	DC0000175 (see Appendix A)		
Permit Effective Date:	November 25, 2008		
Permit Expiration Date:	November 24, 2013		
SWPPP Development Date:	February 8, 2011 (date of latest revision)		
SWPPP Developed By:	Aggregate Industries		
Site Area:	13 acres		
Receiving Water and/or MS4:	Anacostia River via unnamed tributary of the northwest branch of the Anacostia River		

On-Site Inspection Overview

Inspection Date: February 19, 2013 **Entry Time:** 8:47 am EST **Exit Time:** 12:23 pm EST

Name	Title/Affiliation	Telephone
Inspectors:		
Allison Graham	Inspector – USEPA Region 3	(215) 814-2373
Brian Krausz	Inspector – USEPA Headquarters	(202) 564-3069
Mark Briggs	Inspector – ERG	(989) 345-7595
Lauren Scott	Inspector – ERG	(703) 633-1636

Name	Title/Affiliation	Telephone
Inspectors:		
Kathleen Wu	Inspector – ERG	(703) 633-1625
Site Representatives:		
Lester Fultz	Area Manager	(301) 399-2363
Robert Buelt	Plant Manager	(301) 748-9409
Other Participants:		
Adion Chinkuyu	Inspector – District Department of the Environment (DDOE)	(202) 535-2193
David Pilat	Inspector – District Department of the Environment (DDOE)	(202) 281-3963

A site location map, facility layout map, drainage area and site outline map, chemical storage map, and photograph map for the Fort Totten Ready-Mix Concrete Facility (Facility) are provided in Appendix B. A sign in sheet from the inspection is provided in Appendix C.

Credential Presentation:
Ms. Allison Graham with USEPA Region 3 presented credentials to Mr. Lester Fultz and Mr. Robert Buelt of Aggregate Industries and explained that the purpose of the inspection was to evaluate compliance with the Facility's industrial stormwater National Pollutant Discharge Elimination System (NPDES) Permit (see Appendix A). The EPA inspection team was comprised of Ms. Graham, Mr. Karusz, Ms. Scott, Mr. Briggs and Ms. Wu.

Weather and Precipitation:
Cloudy and rainy weather conditions with temperatures in the 40°F range were experienced during the inspection. National Oceanic and Atmospheric Administration (NOAA) National Weather Service rainfall data prior to the inspection are provided in the table below.

Rainfall Data Prior to Inspection of Aggregate Industries Fort Totten Ready-Mix Concrete Facility

Date	Rainfall Amount (inches)[a]
February 14, 2013	0
February 15, 2013	0.1
February 16, 2013	0.02
February 17, 2013	0
February 18, 2013	0

a. Recorded at Washington Reagan National Airport.

Documentation:
Documents requested by the EPA inspection team during the inspection and provided by Aggregate Industries on March 5, 2013 are listed in Appendix D. These include the Facility's Stormwater Pollution Prevention Plan (SWPPP), daily inspection logs, discharge monitoring reports (DMRs), corrective action documentation, and annual reports. Each of these documents is provided in its entirety

on the compact disk (CD) accompanying this report. Photographs were taken by Ms. Allison Graham, EPA, during the inspection and are provided in Appendix E.

The Facility's industrial stormwater NPDES permit, SWPPP, inspection logs, and corrective action documentation were located at the Facility and were made available to the EPA inspection team during the inspection.

Description of Industrial Operations

Super Concrete Corporation doing business as (d/b/a) Aggregate Industries is located in Northeast Washington, DC and manufactures ready-mix concrete products. Approximately 50 people work at the Facility. The locations of the site access road, aggregate storage areas, settling basins, outfalls, and other site features and equipment observed by the EPA inspection team are identified on the facility location map that is provided in Appendix B.

Materials used in the production of ready-mix concrete at the facility include sand, aggregate, cement, water, and chemical additives. Aggregate is trucked to the site and stockpiled in one of two outdoor aggregate storage areas that are exposed to precipitation (see Photographs 6, 7, and 8 in Appendix E). According to the SWPPP and site personnel, chemical additives for the admixture are trucked to the site two times per week and are stored in a room with secondary containment. No salt piles are present on site. Fuel is stored on site in various aboveground storage tanks, which are included in the SWPPP.

Concrete trucks enter the facility from the access road off of Brookland Avenue NE, stop beneath a hopper where specific amounts of cement, aggregate, water, and admixtures are loaded into the truck mixer. Loaded trucks exit the facility through the access road and deliver the finished concrete to job sites. Excess concrete is sometimes used to make concrete blocks.

A sediment trap is located near the batch plant. Sediment is cleaned out of the trap once per week and taken to the waste concrete drying area. After it has dried, the sediment is shipped off site to a recycler. An oil/water separator is present at the site. According to site personnel, it is not used and does not tie into the sanitary sewer system. The oil/water separator has never been cleaned out. A truck maintenance shop is present at the Facility; however, large maintenance jobs occur off site. The truck maintenance shop disposes of used oil and used anti-freeze once per week.

According to the SWPPP, the Facility generates approximately 150,000 gallons per day of process wastewater. The majority of this process wastewater is treated, recycled, and reused in the manufacturing of concrete. Precipitation is also captured from impervious surfaces at the facility and directed to various settling basins so that it can also be used as make-up water in the manufacturing of concrete. The facility has a primary and backup wastewater treatment system. All rinse water and stormwater runoff flows to one of three settling basin areas and a stormwater overflow storage area that captures water and allows solids to settle (see Photographs 33, 34, 42, 43, 44, 45, 56, 62, and 63 in Appendix E). Wash water and runoff flows in a southeast direction on the site. Wash water and runoff from the concrete processing area flows to Settling Basins 2 and 3. Concrete mixers are rinsed in the truck rinse area after they are loaded. Wash water from the truck rinse area flows to Settling Basin 2, which has 2 cells. Returning vehicles dispose of excess concrete at the waste concrete drying area. Returning vehicles wash out residual concrete in the truck washout pits where the wash water flows to

Settling Basin 3, which has 6 cells. Water from Settling Basin 2 is transferred to Settling Basin 3 and then through the primary treatment system where pH is adjusted and water is filtered. The treated water is transferred to Settling Basin 1 where it is pumped back to the concrete manufacturing process for reuse. Settling Basin 1 has 3 cells. Some untreated runoff also enters Settling Basin 1. Solids are periodically removed from the settling basins. In the event of a large precipitation event, wash water and runoff flows into the stormwater overflow storage area. This area also has an underground cistern that is used for additional storage. There are no storm drain inlets or catch basins located on the property.

According to the SWPPP, the site has an occasional discharge of treated process water and treated site-generated stormwater runoff. When necessary, water from Settling Basin 3 is treated by the primary treatment system and discharged from the site via Outfall 004 (see Photograph 36 in Appendix E). Outfall 004 is a 30-inch concrete pipe that discharges into a concrete swale that flows into an unnamed tributary of the northwest branch of the Anacostia River. Discharges through Outfall 004 generally occur during either wet weather events when storage capabilities on site are exceeded or during times when process water cannot be reused. Outfall 004 is the only permitted outfall.

Permit Requirements and Observations

The following observations were made relative to the requirements of NPDES Permit No. DC0000175 (NPDES Permit). During the inspection, the EPA inspection team walked the entrance/exit, aggregate storage areas, concrete batch plant area, truck rinse area, truck washout pits, settling basins areas, and stormwater overflow storage area.

Part I

Part I.A. (Effluent Limitations and Monitoring Requirements) - During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge from outfall number 004 (38°56'55" latitude and 77°00'21" longitude) stormwater from stockpiles, production area and paved areas, and process water from truck washing and Facility sweeping. Such discharges shall be limited, monitored, and reported by the permittee as specified below:

Parameter	Discharge Limitations				Monitoring Requirements	
	lb/day		Other units			
	Average Monthly	Max Daily	Average Monthly	Max Daily	Frequency	Sample
Flow	NA	NA	NA	NA	*	Measured
Total Suspended Solids (TSS)	33 lbs/day	66 lbs/day	23.4 mg/l	46.8 mg/l	*	Grab
Oil and Grease	NA	NA	10 mg/l	15 mg/l	*	Grab

Parameter	Discharge Limitations				Monitoring Requirements	
	lb/day		Other units			
	Average Monthly	Max Daily	Average Monthly	Max Daily	Frequency	Sample
Biochemical Oxygen Demand (BOD)	NA	NA	NA	NA	*	Report only by grab sampling

*monitoring and reporting shall be performed each time a discharge occurs.

The pH of the final effluent shall not be less than 6.0 standard units nor greater than 8.5 standard units and shall be monitored weekly by a grab sample. The discharge shall be free from floating solids, sludge deposits, debris, oil, and scum in other than trace amounts. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: Outfall No. 004 only.

Observation 1: According to its NPDES Permit, Aggregate Industries is only authorized to discharge from Outfall No. 004.

- The EPA inspection tem observed a drainage flow pattern located within the vegetated area along the northeast corner of the property extending to the eastern perimeter. The drainage flow pattern was adjacent to Aggregate Storage area #1 and appeared to have dried aggregate material deposits throughout its entire length (see Photographs 21-24 in Appendix E).

- Dried leaves and sediment deposits were observed on the interior of Outfall 001 (see Photograph 36).

Observation 2: ERG received copies of daily inspection forms titled "Environmental Management Daily Log" for inspections performed from February 2012 through February 2013 (see Item 5 in Appendix D). The Environmental Management Daily Log was not provided for any dates falling on a Sunday. ERG received copies of monthly discharge monitoring reports (DMRs) from February 2011 through January 2013 (see Items 6 and 7 in Appendix D). During the inspection Mr. Buelt stated that the Facility is required to sample on the first day of a discharge.

DMRs include sampling information from only the first discharge of each month rather than an average of all discharges during that month. Discharges were reported in the Environmental Management Daily Log on the following dates, but were not included in the average monthly calculations reported in the DMR: 6/4/2012, 6/5/2012, 6/7/2012, 6/13/2013, 7/20/2012, 7/21/2012, 8/10/2012, 8/13/2012, and 9/12/2012.

The June 2012 DMR states that 145,000 gallons was discharged between 5/25/12 and 6/24/12. The Environmental Management Daily Log records the following discharges for that time frame: 108,000 gallons on 6/1/12, 77,040 gallons on 6/4/12, and 102,480 gallons on 6/5/12.

The July 2012 DMR states that 44,760 gallons was discharged between 6/25/12 and 7/24/12. The Environmental Management Daily Log records the following discharges for that time frame: 44,760 gallons on 7/19/12, 115,000 gallons on 7/20/12, and 45,000 gallons on 7/21/12.

The August 2012 DMR does not have a flow provided on page 1 of EPA Form 3320-1. The DMR states that 98,000 gallons was discharged between 7/25/12 and 8/24/12. The Environmental Management Daily Log records the following discharges for that time frame: 65,000 gallons on 8/8/12, 96,500 gallons on 8/10/12, and 187,200 gallons on 8/13/12.

The September 2012 DMR states that 135,000 gallons were discharged between 8/25/12 and 9/24/12. The Environmental Management Daily Log records the following discharges for that time frame: 130,000 gallons on 9/11/12 and 156,960 gallons on 9/12/12.

The discharge volume on 11/2/2012 was not provided in the Environmental Management Daily Log and a discharge of 612,000 gallons was submitted in the DMR for monitoring from 10/25/12 to 11/24/12.

Part III

Part III 1.B – The SWPPP shall require the implementation of best management practices (BMPs) to prevent or reduce pollution in storm water discharges. BMPs include schedules or activities; prohibitions of practices; maintenance procedures; treatment requirements; operating procedures, practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Observation 3: The EPA inspection team made the following observations regarding BMPs to control Facility spillage or leaks:

- A sheen was observed in stormwater sheet flow from the paved truck entrance into the Facility. The EPA inspection team did not observe BMPs to control the sheen (See Photograph 25 of Appendix E).
- Soil staining was observed adjacent to the Facility's 500 gallon diesel fuel storage tank. The EPA inspection team did not observe BMPs utilized to clean up the staining (See Photograph 71 of Appendix E).

Part III 1.C.(3) – Material Storage Practices – Improper storage can result in the release of materials and chemical that can cause water pollution.

Observation 4: The EPA inspection team observed the storage of Clean Edge 4660 Organic Release Agent without secondary containment. The Clean Edge 4660 Organic

Release Agent was located north of the Settling Basins 3 (See Photographs 54-55).

Part III 1.C.(3)(a) – Good Housekeeping – Good housekeeping that requires the maintenance of a clean, orderly facility. Good housekeeping practices can include but are not limited to: regularly pickup and dispose of garbage and waste material.

Observation 5: The EPA inspection team made the following observations regarding housekeeping:

- Trash was located in the wooded area along the northeast corner of the property as well as in vegetated swales on the property (see Photographs 16-17 and 29-30 in Appendix E).
- Empty chemical storage tanks were observed in various locations throughout the Facility (see Photographs 27 and 28 in Appendix E).